## ABSTRACT OF THE DISCLOSURE

A radiation imaging apparatus includes a radiation detecting unit and an image-display controlling unit. The radiation detecting unit has radiation detectors, arranged in a two-dimensional array, for detecting radiation transmitted through an object as electrical signals. The image-display controlling unit radiographs radiation images of the object, detected as the electrical signals by the radiation detecting unit, at a predetermined frame rate as continuous images in a plurality of frames and displays a processed image given by subtracting an m-th image from an (m+1)-th image in synchronous with either the m-th image or the (m+1)-th image that does not undergo the subtraction in a display, where m is a natural number.